

# **PMX SERIES** Powered Mixer with DSP Effects



Congratulations on your choice of the NADY AUDIO PMX Series powered console mixer — you have purchased one of the finest powered mixing units on the market today. This unit was developed using the expertise of professional sound engineers and working musicians. You will find that your new PMX Series powered mixer has superior performance and greater flexibility than any other powered mixer in its price range. Please read this manual carefully to get the most out of your new unit. Thanks for selecting NADY AUDIO as your choice in powered mixers



### FEATURES

- 16 Mono channels (6 channels for the PMX-600) plus 2 Aux Returns and a stereo Tape In for a combined total of 20 inputs (10 inputs for PMX-600) with full complement of input controls, connections and indicators
- Power Output 2 x 200W RMS @ 4 ohms (1% THD) with both channels driven. Advanced amplifier design features include fan cooling, short circuit protection, current limiting, speaker DC protection circuits, clip indicators for utmost safety and reliability and power ON/OFF anti-thump circuit for quietest operation
- Excellent audio with warm analog tone perfect for live or recording applications
- Stereo L-R Master Mix and G1-2 Group Submix buses, with 4 master faders and submix to main enable switch
- Built-in 32-bit DSP Echo Effects emulates plate, gate, room, hall, stadium reverbs and delays
- 60 mm faders on all Channels, Groups 1-2, Main L-R, and Effects
- Dual Master 7-band Graphic EQ
- Each channel with balanced XLR Mic and 1/4" TRS line inputs, Trim controls, Peak LED's, Selectable Low Cut filters; Channel

High EQ, frequency sweepable Mid EQ, and Low EQ; Channel Aux 1 and Aux 2-EFF Send controls, Pan controls, assignable L-R and G1-2 switches, and channel faders

- Switchable global +48V phantom power; 2 Aux Sends and 2 Aux Returns; Tape/CD In and Record Out stereo RCA jacks with Tape level control; 10-segment LED display bargraph meters with Power Amp peak indicator
- Outputs include balanced 1/4" TRS and XLR Main Stereo outputs; balanced 1/4 " Group 1 and 2 outputs; adjustable Control Room left and right 1/4" outputs; and stereo headphone output with separate volume adjust and L-R or G1-2 selector; Left and Right dual 1/4" amplifier outputs for easy speaker daisy-chaining
- Internal shielded AC supply with 115V(60Hz)/230V(50Hz) select switch
- Dimensions & Weights: PMX-1600: (HWD) 6.4" x 28.7" x 17.2" (163 x 729 x 437mm); 35.25 lbs. (16 Kg) PMX-600: (HWD) 6.4" x 16.9" x 17.2" (163 x 430 x 437mm);

**PMX-600:** (HWD) 6.4" x 16.9" x 17.2" (163 x 430 x 437mm); 24.5 lbs. (11.1 Kg)

### CONTENTS

FEATURES	2
WARNING	3
INSTALLATION	4
1. Inspection	4
2. Setup and Operation	4
CONTROLS AND CONNECTIONS	5
1. Channel Section	5
2. Master Echo Effects Section	7
3. Master Control and EQ Section	7
4. Master Input / Output Section	8
5. Rear Panel	9
6. Connection Example	
SPECIFICATIONS	11
1. Input Section	11
2. Mixer Section	11
3. Output Section	
4. General	11

Date of Purchase
Dealer's Name
City
State
Zip
Model #
Serial #

# WARNING





An equilateral triangle enclosing a lightening flash/arrowhead symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure which may be of sufficient magnitude to constitute a risk of electric shock.



An equilateral triangle enclosing an exclamation point is intended to alert the user to the presence of important operating and service instructions in the literature enclosed with this unit.

# **IMPORTANT SAFETY INSTRUCTIONS**

When using this electronic device, basic precautions should always be taken, including the following:

- 1. Read all instructions before using the product.
- 2. Do not use this product near water (e.g., near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, etc.).
- 3. This product should be used only with a cart or stand that will keep it level and stable and prevent wobbling.
- 4. This product, in combination with headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- 5. The product should be positioned so that proper ventilation is maintained.
- 6. The product should be located away from heat sources such as radiators, heat vents, or other devices (including amplifiers) that produce heat.
- 7. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product. Replace the fuse only with one of the specified type, size, and correct rating.
- 8. The power supply cord should: (1) be undamaged, (2) never share an outlet or extension cord with other devices so that the outlet's or extension cord's power rating is exceeded, and (3) never be left plugged into the outlet when not being used for a long period of time.
- 9. Care should be taken so that objects do not fall into, and liquids are not spilled through, the enclosure's openings.
- 10. The product should be serviced by qualified service personnel if:
  - A. The power supply cord or the plug has been damaged.
  - B. Objects have fallen into, or liquid has been spilled onto the product.
  - C. The product has been exposed to rain.
  - D. The product does not appear to operate normally or exhibits a marked change in performance.
  - E. The product has been dropped, or the enclosure damaged.
- 11. Do not attempt to service the product beyond what is described in the user maintenance instructions. All other servicing should be referred to qualified service personnel.

### INSTALLATION

To ensure years of enjoyment from your NADY AUDIO PMX Series, please read and understand this manual thoroughly before using the unit.

### INSPECTION

Your NADY AUDIO PMX Series powered mixer was carefully packed at the factory in packaging designed to protect the units in shipment. Before installing and using your unit, carefully examine the packaging and all contents for any signs of physical damage that may have occurred in transit.

[Please note: Nady Systems is not responsible for shipping damage. If your unit is damaged, do not return to Nady, but notify your dealer and the shipping company (if shipped to you) immediately to make a claim. Such claims must be made by the consignee in a timely manner.]

### **SETUP AND OPERATOIN**

Parts of the unit can become very warm during use. This is normal during operation. Care should be taken to ensure that there is enough space around the unit for cooling. Also, do not place the PMX Series powered mixer on high temperature devices such as power amplifiers, etc., or the unit may overheat in operation.

Although the unit's chassis is shielded against radio frequency (RF) and electromagnetic interference (EMI), extremely high fields of RF and EMI should be avoided.

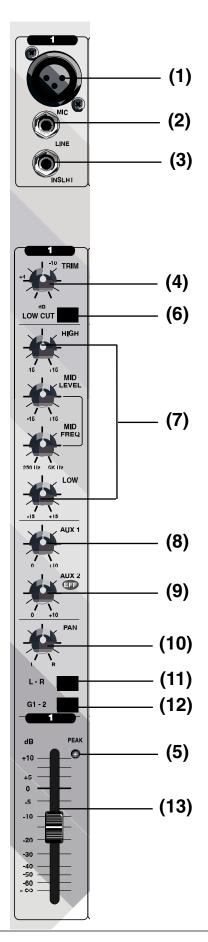
Please make sure that the power unit supplied is marked for the correct voltage in your area (120VAC/60 Hz or 230VAC/50 Hz). Power requirements for electrical equipment differ from area to area. In new installations and portable sound systems, or any situation in which the AC power is in question, it is wise to confirm the voltage and use the appropriate power supply unit before connecting it to power sources.

Europe (except UK): 230V, 50Hz UK and Australia: 240V, 50Hz USA and Canada: 120V, 60 Hz

For other areas, please check with local authorities.

When ready to operate, plug the AC cord into the power source. Make sure that the unit is turned off before connecting to the AC power source to avoid possible loud transients which can damage your speakers or your ears. Set the **Channel** (13), **Group (22)**, and **Master Stereo Volume Faders (24)** to minimum to further reduce the chance of undesired noise when first powering up. Turn on your PMX Series powered mixer by pressing on the rear panel **Power On/Off Switch** (38).

For other areas, please check with local authorities.



### **1. CHANNEL SECTION**

### (1) MIC INPUT

This electronically balanced XLR input is designed to accept signals from any balanced or unbalanced low impedance (Low Z) microphone. To accommodate condenser microphones, this input is also equipped with +48VDC phantom power globally switchable to all XLR input jacks with the **Phantom Power Switch (27)**. Dynamic or ribbon-type microphones do not require phantom power. The XLR jack is configured for: Pin1 = ground, Pin2 = positive (+), Pin3 = negative (-). The Mic inputs are more sensitive than the Line inputs. It will be necessary to adjust the channel gain with the input **Trim Control (4)** to achieve a nominal operating level.

[Note: Do not connect mics when phantom power is already switched on, as indicated by the **Phantom Power LED (27)** in the Master Section of the top panel. Never use unbalanced mic cables with the Phantom Power switched on. Never short the +48VDC to ground, as that can cause serious damage to your mixer. Also, turn down the **Master Stereo Volume Faders (24)** to prevent possible sharp transient noise from damaging the speakers when turning the phantom power on or off.]

### (2) LINE INPUT

This 1/4" input is designed to accept balanced or unbalanced line-level signals such as those from keyboards, drum machines, or samplers. There is enough gain available on the line input to accept even lower level signals, such as those from an unbalanced microphone or guitar output. If a balanced signal is to be connected to the line input, then a 1/4" TRS (stereo) phone plug should be wired for: Tip = positive (+), Ring = negative (-), Sleeve = ground.

[Note: Only the Mic or the Line input of a given channel should be connected at one time. Do not connect both at the same time.]

### (3) INSERT

All channels are equipped with insert jacks to connect external signal processors such as compressors, noise reduction systems, or effects devices to the individual input channels. Insert points are useful for adding dynamic processing or equalization to a channel or the mix. Unlike reverbs, etc., which are usually added to the dry signal, dynamic processing is normally applied across an entire signal. Here an Aux Send would be inappropriate. Instead, the signal is intercepted somewhere along the channel, fed through the dynamics processor and/or EQ, and then returned to the console at the same point where it left. The insert point is normalized, i.e., the signal is only interrupted when a plug is plugged into it. To use Inserts as a Send/Return, an insert cable is required which will split the 1/4" TRS insert connection to two plugs, one for Send and one for Return. The insert jack is pre EQ in the channel and is configured as: Tip = send, Ring = return, Sleeve = ground.

The Insert can also be used as a channel direct output by sending the signal from the ring. To use the Insert as a direct output, insert a 1/4" phone plug halfway into the Insert jack so the tip of the plug connects with the ring of the insert jack. The jack will click into place when the connection to the ring is made.

### (4) TRIM CONTROL

The Trim control adjusts the input sensitivity (channel gain) of the Mic and Line inputs on the channels. This control can be adjusted to accommodate input signals from a wide variety of sources, from the high outputs from keyboards or drum machines to the small signal outputs of microphones. The trim control adjusts the input sensitivity with 30dB of range. The best balance of S/N and dynamic range will be achieved if you adjust the TRIM control on each channel separately so that the **Channel Peak LED (5)** for that channel almost lights.

### (5) CHANNEL PEAK LED

The Peak LED illuminates when a channel input is overloading. It detects the peak level after the **Equalizer Controls (7)** and will light just before clipping to warn that the signal is approaching overload. You do not want the Peak LED to light except very intermittently. If it lights persistently, reduce the **Trim Control (4)**.

### (6) LOW CUT FILTER

Use this Low-Cut (high-pass) filter (18 dB/octave, -3 dB at 75Hz) for reducing floor rumble, popping, breathing noises, woolly bottom end, and to tighten up channels in a mix, etc. It is most effective when used carefully in conjunction with the **Equalizer Controls (7)**.

### (7) EQUALIZER CONTROLS

All channels are fitted with a three-band EQ - High, Mid and Low controls. The Mid control has a parametric Mid Freq control with a 250Hz-6KHz range. All three bands have up to 15 dB of cut and boost, with a center detent for OFF. The frequency response is flat when all three EQ knobs are in the center detent position. The High and Low shelving controls have their frequencies fixed at 12 KHz and 80Hz respectively. The Mid control has a parametric Frequency Control. This control can be used to locate the frequency of the midrange tones that you want to accentuate or cut. The channel EQ is a valuable feature of the mixer as it allows the user to control the tonal characteristics of each channel separately. For example, boosting the Low can fatten the sound, add bass to vocals, or extra punch to bass, drums and synths. The Mid control, with the Mid Freq set to higher frequencies, can be used to define percussive instruments or bring out the edge of vocals; when set to lower frequencies the Mid can boost low midrange frequencies to fatten up guitars, toms, or bring warmth to vocals. Adjusting the High control can provide a crisp sounding high end. Another very important, yet often overlooked technique is to use the EQ to subtract from the mix. Cutting the High control can reduce unwanted sibilance, hiss, cymbals, or high frequency feedback, while attenuating the Mid or Low can also eliminate feedback or clear up a muddy sounding mix. The Mid Freq control can also be used to reduce any feedback from 250Hz to 6Khz. Cutting the High and Low, then pushing up the Channel Fader (13) is equivalent to mid range boost!

[Note: Always reset a channel's input **Trim Control (4)** (or external device's output level) after altering the amount of equalization.]

The key to successful equalization is to avoid excess. Too much equalization on the input channels will result in a mix that is smeared together with nothing specifically defined. During rehearsals, experiment with the equalizer controls on various instruments, vocals and combinations of these mixed together to become familiar with various equalizer settings.

### (8) AUX 1 CONTROL (PRE-FADER)

The channel Aux 1 control is mono, post-EQ, and pre-fader meaning the signal level sent to the Aux Send 1 bus will be unaffected by the channel fader setting. This configuration is ideal for almost all monitoring purposes: for example, for a separate stage monitor mix in live performances or a studio room monitor in recording applications, such as for a headphone cue system.

### (9) AUX 2 / EFFECT CONTROL (POST-FADER)

This control adjusts the level of signal sent to the Aux Send 2 or the internal DSP Echo Effects.

The channel Aux 2 control is mono, post-EQ, and post-fader meaning the signal level sent to the Aux 2 bus will be affected by the channel fader setting. For almost all effects send purposes, you will want to use the post-fader Aux 2, so that when a fader level is adjusted, any reverb send from that channel follows the fader. Otherwise, when the fader is pulled down, the reverb from that channel would still be audible. You can also use this Aux 2 send to feed inputs of a multi-track recorder or any other unbalanced line level application. On the other hand, for cueing purposes and monitor amplifiers, use the pre-fader Aux 1 (i.e. independent of the channel fader).

The Aux 2 Effect Send controls also adjust the level sent by each channel to the internal DSP (Digital Sound Processor) Echo Effects. Either the Aux Send 2 or internal Echo Effects can be selected with the Aux 2 / Eff Enable Button (15).

### (10) PAN

The channel Pan positions the output of the channel in the left/right stereo field of the Master mix and also pans between 1 and 2 in the Group mix. Its constant-power design ensures there are no level discrepancies whether a signal is hard-panned, center-stage, or somewhere in-between.

### (11) L-R SELECT SWITCH

When the L-R switch is selected (button depressed), the post fader channel signal is fed to the **Master Stereo Volume Faders (24)**.

### (12) GROUP SELECT SWITCH

When the G1-2 switch is selected (button depressed), the channel signal is fed to the G1-2 bus, controlled by the **Group 1-2 Volume Faders (22)**. This signal is post channel fader and the stereo placement is adjusted by the Pan control. The Group bus offers you a second stereo submix with its own stereo G1-2 submaster faders. This submix can be sent to the **Master Stereo Volume Faders (24)** by enabling the **Group To Main Switch (23)**. The Group Mix can be used as a convenient mixing aid both live and in the studio; for example, to combine the outputs of all drum channels onto just 1 or 2 submaster faders, or to mix together a vocal quartet and then control their combined level in the Master Mix, or to route separately to multi-track recorders. The Group Select Switch can also be used to monitor the channel signal in the headphones, without sending the signal to the main outputs, with the L-R Select Switch (11) off.

### (13) CHANNEL FADER

The channel faders determine the output signal level to the Master Mix or Group 1-2 buses. They offer a smooth logarithmic taper more often associated with much more expensive consoles for optimum control of the signal.

### 2. AUX EFFECTS SECTION

### (14) AUX SEND 1 & 2 LEVEL CONTROLS

These controls adjust the final mixed level of the channel Aux 1 and Aux 2 auxiliary signals separately. These signals are then sent to the **Aux Send 1 & 2 Outputs (30)** respectively. These signals can be sent to the input of an effects processor, multi-track recorder, or used for any other line-level auxiliary purpose, such as monitor feeds. If the signal is going to be used for an external reverb/delay device, preferred instead of the internal Echo Effects, Aux Send 2 should be used and the **Aux 2 / Effects Enable Switch (15)** should be set to Aux 2 (button out). This will disable the internal Echo Effects. When the switch is depressed, the Aux 2 level control and output are disabled.

### (15) AUX 2 / EFFECTS ENABLE SWITCH

This push button switch determines if the Channel Aux 2 Eff Send signals are sent to Aux Send 2 (button out) or to the internal Echo Effects section (button depressed). The **Aux 2 Level Control (16)** and output are disabled when this button is set to enable the internal Echo Effects. Note the Aux Return 2 is operational regardless of this switch setting.

### (16) AUX RETURN 1 & 2 LEVEL CONTROLS

These controls adjust the signal level from the Aux Return 1 & 2 Inputs, which are then mixed into the Left and Right Master bus. These can be used to return effected signals into the PMX Series powered mixer or they can be used as auxiliary inputs from line level devices such as keyboards or Tape Returns of multi-track recorders. The internal Echo Effects cannot be applied to these auxiliary returns. Note, Aux Return 2 is operational regardless of the **Aux 2 / Effects Enable Switch (15)** setting.

### (17) ECHO EFFECTS TIME DELAY

This control sets the time interval, in milliseconds, of the built-in Echo Effects DSP (Digital Sound Processor). Lower settings select the shortest echo time to emulate plate effects whereas higher settings enable the longest echo time for stadium reverbs and delay sounds with up to 200mS delays. Settings around 100mS emulate medium room and hall reverbs by adjusting the channel Effect Control (9) and Echo Depth (19) to nine o'clock, Echo Input Level (18) to 12 o'clock, and Effect Volume Fader (20) to approximately -10dB.

### (18) ECHO EFFECTS INPUT LEVEL

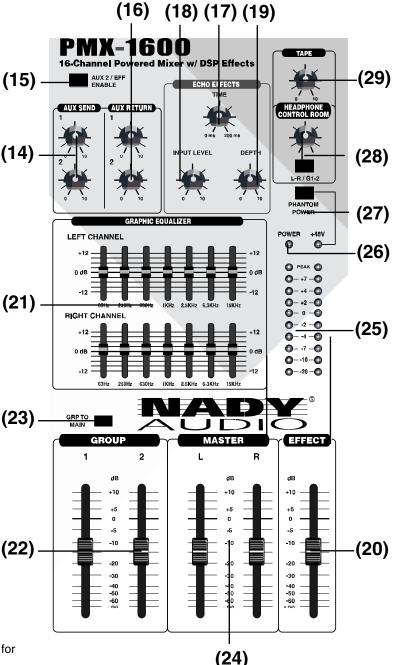
This adjusts the level of signal input into the Echo Effects DSP.

### (19) ECHO EFFECTS DEPTH

This control adjusts the number of repeats and feedback/depth of the echo effect. Turning the control clockwise sets the repeats to maximum for lengthy echoes or plate effects. Turning the control counter-clockwise sets less repeats.

### (20) EFFECT VOLUME FADERS

These faders adjust the final level of the effected tone applied to the Master bus.



### 3. MASTER CONTROL AND EQ SECTION

### (21) DUAL CHANNEL GRAPHIC EQUALIZER

The 7-band graphic equalizers allow you to adjust the frequency response of the Master L and R mix providing a maximum of +/-12dB of cut and boost for each frequency band from the center détente flat position. The top EQ is for the Left channel and the bottom EQ is for the Right channel. This EQ can be used to shape and mold the tone of your audio and easily eliminate feedback at notch frequencies without overly affecting your sound.

### (22) GROUP 1 & 2 VOLUME FADERS

These faders adjust the level of the Group 1 & 2 submix signals that are sent to the **Group Outputs (35)** and can also be selected for the **Headphone (33)** and **Control Room (34)** 

outputs for easy monitoring. The Group can be a very useful feature if used effectively. For stage applications the Group mix can be sent to a monitor amplifier so the performers will only hear the audio that is not already loud enough on stage. Subgroups are commonly used as a mixing aid both live and in the studio. For example, you can combine the outputs from all drum channels onto just the two Group faders. This submix can also be added to the Main/Master mix by depressing the Group to **Main Switch (23)**.

### (23) GROUP TO MAIN SWITCH

When this push-button switch is depressed, the Group submix is added to the Main/Master bus. This allows controlling the combined volume of multiple channels with only two faders, which can be useful when mixing a vocal quartet or multiple mics for grouped instruments like percussion or drum kits.

### (24) MASTER STEREO VOLUME FADERS

This adjusts the final level of the Master Left & Right signals, that are sent to the Main (36), Headphone (33), and Control Room (34) Outputs and also to the Speaker Stereo Outputs (37).

#### (25) DUAL CHANNEL LED VU METER

These 10-stage stereo output LED meter displays will display the relative output level of the Left and Right Main (36) and **Speaker Outputs (37)**. They can be used to maintain proper levels in the master mix. The top red Peak LED will light when the powered output signal is just below clipping. It is acceptable if the red LED lights occasionally. If the red LED lights more than occasionally, you should turn down the Master Stereo Volume Faders (24) to avoid audible distortion and clipping, which can cause damage to your speakers and even the internal amplifier.

### (26) POWER LED

This LED will illuminate when the unit is switched on.

### (27) PHANTOM POWER

When this switch is depressed, +48V of phantom power will be supplied to the mic channels. The yellow LED will illuminate when the switch is depressed to ON.

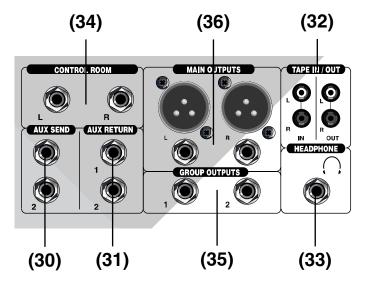
[Note: When turning on the Phantom Power switch, turn the Master Volumes to minimum.]

### (28) HEADPHONE / CONTROL ROOM

The volume control adjusts the level of the Headphone and Control Room Outputs. The push-button selector switch will determine which signal is sent to these outputs - depressed for Group 1 & 2, out for Master Stereo.

#### (29) TAPE LEVEL CONTROL

This control adjusts the level of the Tape Input signal applied to Master/Main bus.



### 4. MASTER INPUT / OUTPUT SECTION

### (30) AUX SEND 1 & 2 OUTPUTS

These mono unbalanced 1/4" jacks output the auxiliary signals which can be adjusted by the **Aux Send 1 & 2 Level Controls** (14).

#### (31) AUX RETURN 1 & 2 INPUTS

These mono unbalanced 1/4" jacks enable convenient inputs to the Master/Main busses. If you connect a signal to the return jacks, the signal will be routed to the **Aux Return 1 or 2 Level Controls (16)** and then mixed into the left and right Master/Main bus.

### (32) TAPE INPUT / RECORD OUTPUT

The Left and Right Tape Input RCA jacks allow cassette recorders, CD players, or MP3 players to be added to the Master/Main mix outputs. The input signals can be adjusted by the **Tape Level Control (29)**. The Record Output RCA jacks provide a stereo signal output to recording devices, home audio equipment, or external amplifiers. These outputs are post **Master Stereo Volume Faders (24)**.

### (33) HEADPHONE OUTPUT

The Headphone 1/4" stereo output can be used to monitor either the Master or Group mix. It will power headphones with impedances of  $8\Omega$  or greater.

### (34) CONTROL ROOM L-R OUTPUTS

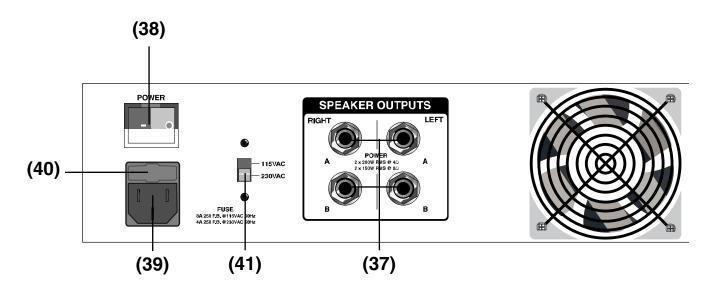
These separate Left and Right 1/4" jacks output the line level signals from the **Headphone/Control Room (28)**.

### (35) GROUP 1 & 2 OUTPUTS

These 1/4" jacks output the Group 1 and 2 line level signals.

#### (36) MAIN OUTPUTS

These balanced XLR and unbalanced 1/4" jacks output the final Master/Main Mix line level signals.



### 5. REAR PANEL

### (37) SPEAKER OUTPUTS

• RIGHT - These two 1/4" speaker output jacks are paralleled together for the Master Right output signal and can deliver up to 200W RMS to a  $4\Omega$  load.

• LEFT - These two 1/4" speaker output jacks are paralleled together for the Left output and can deliver up to 200W RMS to a  $4\Omega$  load.

[Caution: Never use less than  $4\Omega$  Total impedance for either channel as this can cause the amplifier to overheat and create thermal runaway.]

### (38) POWER ON/OFF SWITCH

To turn the unit on, press the side of the rocker switch closest to the side of the mixer. To turn the unit off, press the rocker switch towards the middle of the mixer.

#### (39) POWER CONNECTOR

The IEC jack is used to connect the power cord to the AC Power Source.

[Caution: Never remove the center grounding pin as this can cause a serious safety hazard and will immediately void your warranty.]

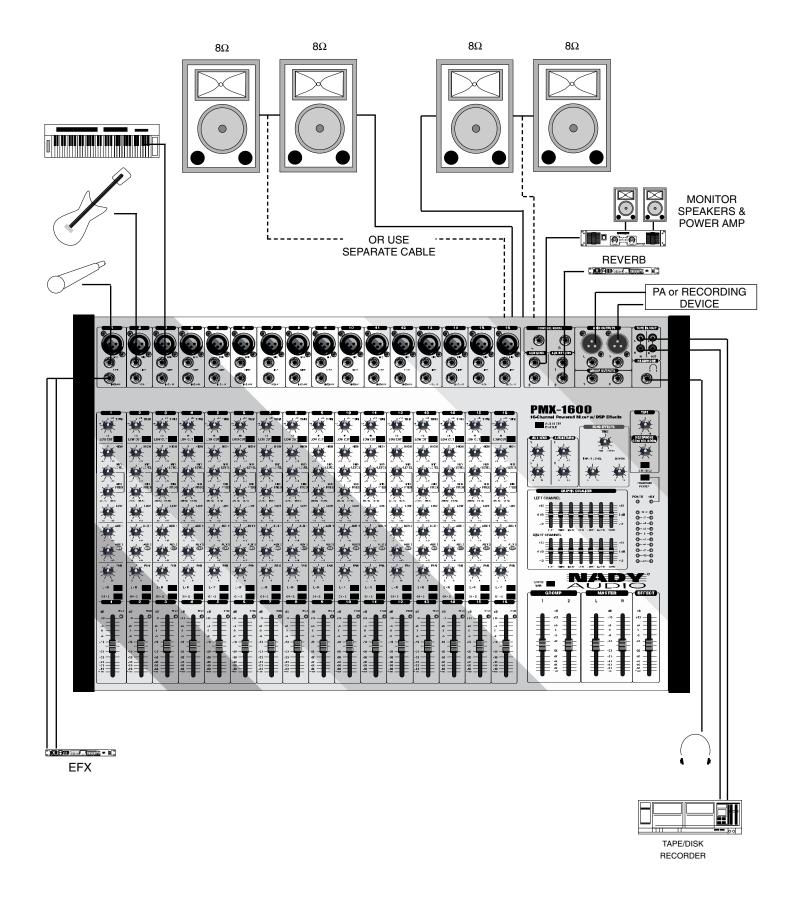
#### (40) FUSE COMPARTMENT

Replace with only the same type fuse. If the fuse blows continuously, have the unit serviced by qualified personnel. The PMX Series powered mixer uses 20mm glass tube Fast Blow fuses: 8A 250V for 115VAC, 4A 250V for 230VAC.

#### (41) AC VOLTAGE SELECTOR SWITCH

Before plugging in the power cord, check to see that the unit is set for the proper voltage for your area: ~115V (60Hz) or ~230V (50Hz).

## CONNECTIONS



## SPECIFICATIONS

### 1. INPUT SECTION

Input	Connector	Input Impedance	Max Level
MONO CH MIC	XLR BALANCED	2.8ΚΩ	+13dBu, 3.6V RMS*
MONO CHANNEL LINE	1/4" UNBALANCED	10KΩ	+17dBu, 5.5V RMS
	1/4" TRS BALANCED	20ΚΩ	+23dBu, 11V RMS
AUX RETURN	1/4" UNBALANCED	10KΩ	+11dBu, 2.8V RMS
TAPE IN	STEREO RCA JACKS	10KΩ	+18dBu, 6V RMS
INSERT INPUT	1/4" UNBALANCED	10KΩ	+22dBu, 10V RMS
With Trim, Tapo In, and Aux Poturn Loval controls set to Mid (50%)			

With Trim, Tape In, and Aux Return Level controls set to Mid (50%) \*With Trim set to Min (0%)

### 2. MIXER SECTION

Trim	Range 28dB
Channel High EQ +/-15dB	
Channel Mid EQ +/-15dB	
Channel Low EQ +/-15dB	
Channel Aux 1, Aux 2 Eff, Pan	Rotary controls
Low Cut, L-R Select, G1-2 Select	Push-button switches
Channel faders	∞ to +10dB, 60mm sliders
Echo Effect Time Delay	0 to 200mS
Dual 7-Band EQ +/-12dB	
Master and Group dual faders, Effect single fader	∞ to +10dB, 60mm sliders

### 3. MASTER OUTPUT SECTION

Channel Input to Main Output	
Frequency Response	20Hz~25KHz (+/- 3dB)
THD + Noise	
S/N Ratio	85dB (gain controls @ unity), -94dB (gain controls down)
Noise Floor	

Output	Connector	Output Impedance	Max Level
AUX SEND 1 & 2	1/4" UNBALANCED	200Ω	+21dBu, 9V RMS
GROUP 1 & 2	1/4" UNBALANCED	200Ω	+18dBu, 6V RMS
CONTROL ROOM L-R	1/4" UNBALANCED	200Ω	+8dBu, 1.9V RMS
RECORD OUT	STEREO RCA JACKS	1.4KΩ	+21dBu, 8.5V RMS
MAIN L-R	1/4" UNBALANCED	200Ω	+21dBu, 8.5V RMS
	XLR BALANCED	400Ω	+27dBu, 17V RMS
HEADPHONE	1/4" STEREO	12Ω	2 x 50mW, 1.75V RMS**

\*\*When connected to  $32\Omega$  output

### DOWED OUTDUT SECTION

4. POWER OUTPUT SECTION	
Power Output	
8Ω Both Channels Driven (1% THD)	
$8\Omega$ Both Channels Driven (1% THD)	
Channel Input to Speaker Output	
Frequency Response	25Hz~22KHz (+/- 3dB)
THD	0.09%
Frequency Response THD S/N Ratio	72dB (gain controls @ unity), -85dB (gain controls down)
Noise Floor	9mV (gain controls @ unity), 2mV (gain controls down)
Amplifier ProtectionFan cooling, short circuit protection, cu	
	Power ON/OFF relays for anti-thump circuit
5. GENERAL	
Power Requirements Fuse Requirements	Voltage selectable, 115VAC/60Hz or 230VAC /50Hz
Fuse Requirements	
	4A 250V @ 230VAC
PMX-1600	
Weight Dimensions (HWD)	35.25 lbs. (16 Kg)
Dimensions (HWD)	6.4" x 28.7" x 17.2" (163 x 729 x 437mm)
PMX-600	
Weight	24.5 lbs. (11.1 Kg)

The specifications above are correct at the time of printing of this manual. For improvement purposes, all specifications for this unit, including design and appearance, are subject to change without prior notice.

### SERVICE FOR YOUR NADY AUDIO PRODUCT

**(U.S.)** Should your NADY AUDIO product require service, please contact the Nady Service Department via telephone at (510) 652-2411, or e-mail at service@nady.com.

(International) For service, please contact the NADY AUDIO distributor in your country through the dealer from whom you purchased this product.

DO NOT ATTEMPT TO SERVICE THIS UNIT YOURSELF AS IT CAN BE DANGEROUS AND WILL ALSO VOID THE WARRANTY.



NADY SYSTEMS, INC. • 6701 SHELLMOUND STREET, EMERYVILLE, CA 94608 Tel: 510.652.2411 • Fax: 510.652.5075 • nady.com